



USAV2003-0073USNP-Sequence-AUG2006.ST25.txt
SEQUENCE LISTING

<110> Aventis Pharmaceuticals Inc.
PARKAR, Ashfaq
AUGUST, Paul
KUNTZWEILER, Theresa
ARDATI, Mohamad Ali
BASKARAN, Namadev

<120> Nucleic Acid Encoding A Novel Prostaglandin Receptor Protein And
Methods of Use Thereof

<130> USAV2003/0073 US NP

<140> 10/747,994
<141> 2003-12-30

<160> 18

<170> PatentIn version 3.3

<210> 1
<211> 1038
<212> DNA
<213> Cavia porcellus

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cgctcggggc tcgggtcctg ccggccgcgc ccgcagccct cagtcttcta cgtgctgggt 180
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caagccttcg ccttcacatc gtccttcttt gggctcgcct cgacgctcca gctcttagcc 360
atggccctag agtgctgggt gtccctggga cacccttct tctaccagcg gcacatcact 420
gtgcgccggg gcgtgctcgt ggcgccgggt gtgggcgcct tcagcctggc tttctgcgcg 480
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atcgtggacc cttggatctt tatcattttc agaacttcag tatttcggat gttttttcac 960
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gtggaatcca gtctgtga 1038

<210> 2

<211> 345

<212> PRT

<213> *Cavia porcellus*

<400> 2

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Ser Ala Thr Val Gly Gly Val Leu Phe Ser Ala Gly Leu Leu Gly Asn
20 25 30

Leu Leu Ala Leu Ala Leu Leu Ala Arg Ser Gly Leu Gly Ser Cys Arg
35 40 45

Pro Arg Pro Gln Pro Ser Val Phe Tyr Val Leu Val Cys Gly Leu Thr
50 55 60

Val Thr Asp Leu Leu Gly Lys Cys Leu Val Ser Pro Val Val Leu Ala
65 70 75 80

Ala Tyr Ala Gln Asn Arg Ser Leu Arg Gly Leu Ala Pro Ala Gln Gly
85 90 95

Asp Ser Leu Cys Gln Ala Phe Ala Phe Ile Met Ser Phe Phe Gly Leu
100 105 110

Ala Ser Thr Leu Gln Leu Leu Ala Met Ala Leu Glu Cys Trp Leu Ser
115 120 125

Leu Gly His Pro Phe Phe Tyr Gln Arg His Ile Thr Val Arg Arg Gly
130 135 140

Val Leu Val Ala Pro Ala Val Gly Ala Phe Ser Leu Ala Phe Cys Ala
145 150 155 160

Leu Pro Phe Val Gly Phe Gly Asn Phe Val Gln Tyr Cys Pro Gly Thr
165 170 175

Trp Cys Phe Phe Gln Met Ile Ser Gly Asp Asp Ser Pro Ser Val Lys
180 185 190

Gly Tyr Ser Val Leu Tyr Ser Thr Leu Met Ala Leu Leu Val Leu Ala
195 200 205

Ile Val Leu Cys Asn Leu Gly Ala Met Arg Asn Leu Tyr Thr Met His
210 215 220

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Gln Arg Leu Arg Arg His Thr Arg Cys Cys Ser Leu Arg Asp Arg Ala
225 230 235 240

Gly Glu Ala Phe Pro Gln Ser Leu Glu Glu Leu Asp His Leu Leu Leu
245 250 255

Leu Ala Leu Met Thr Val Leu Phe Thr Met Cys Thr Leu Pro Leu Val
260 265 270

Tyr Arg Ala Tyr Tyr Gly Ala Phe Lys Ala Val Glu Glu Glu Pro Asp
275 280 285

Asp Leu Leu Ala Leu Arg Phe Leu Ser Val Ile Ser Ile Val Asp Pro
290 295 300

Trp Ile Phe Ile Ile Phe Arg Thr Ser Val Phe Arg Met Phe Phe His
305 310 315 320

Lys Ile Phe Ile Arg Pro Leu Leu Tyr Arg Asn Trp His Cys His Phe
325 330 335

Tyr Gln Thr Asn Val Glu Ser Ser Leu
340 345

<210> 3
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<212> DNA
<213> Artificial

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<223> 675_Topo_F3 primer

<400> 3
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21

<210> 4
<211> 22
<212> DNA
<213> Artificial

<220>
<223> 675_Topo_R2 primer

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22

<210> 5
<211> 20
<212> DNA
<213> Artificial

<220>

<223> 675_GP_3'RACE_F primer

<400> 5
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<210> 6
<211> 25
<212> DNA
<213> Artificial

<220>
<223> 675_Rev_P2 primer

<400> 6
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<210> 7
<211> 28
<212> DNA
<213> Artificial

<220>
<223> 675_RACE_R9 primer

<400> 7
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<210> 8
<211> 39
<212> DNA
<213> Artificial

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<223> GW675 forward primer

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<210> 9
<211> 37
<212> DNA
<213> Artificial

<220>
<223> GW675 reverse primer

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<210> 10
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<212> PRT
<213> Cavia porcellus

<400> 10

Gln Tyr Cys Pro Gly Thr Trp Cys Arg

1

5

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<210> 11
 <211> 15
 <212> PRT
 <213> *Cavia porcellus*

<400> 11

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<210> 12
 <211> 1080
 <212> DNA
 <213> *Homo sapiens*

<400> 12

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gacaactcgt tgtgccaagc cttcgccctt tcatgtcct tctttgggct ctccctcgaca	360
ctgcaactcc tggccatggc actggagtgc tggctctccc tagggcaccc tttcttctac	420
cgacggcaca tcaccctgcg cctggggcgca ctgggtggccc cgggtggtgag cgccttctcc	480
ctggctttct gcgcgtacc tttcatgggc ttcgggaagt tcgtgcagta ctgccccggc	540
acctggtgct ttatccagat ggtccacgag gagggctcgc tgtcggtgct ggggtactct	600
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gccatgcgca acctctatgc gatgcaccgg cggctgcagc ggcacccgcg ctccctgcacc	720
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gaagaagcag aagacctccg agccttgcca tttctatctg tgatttcaat tgtggaccct	960
tggattttta tcattttcag atctccagta tttcggatat tttttcacaa gattttcatt	1020
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<210> 13
 <211> 1074
 <212> DNA
 <213> *Rattus norvegicus*

<400> 13

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tatgtgctag tgtgcggctt gacggtcacc cacttgctgg gcaagtgtct gatcagcccc	240
atggctcctg ctgcctacgc gcaaaatcgg agcctaaagg aactgctgcc tgcctcaggc	300
aatcagttat gtgaagcctt cgccttcctg atgtccttct ttgggttagc ctcgacctta	360
cagctactgg ctatggcact ggagtgctgg ctgtctctgg gacacccttt cttctaccaa	420
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<210> 14
 <211> 1074
 <212> DNA
 <213> Mus musculus

<400> 14	
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gcgcgctcgg gactgggggtc ttgccggcca gggccactac acccgccgcc ctcggtcttt	180
tatgtgctcg tgtgtggctt gacggtcacc gacttgctgg gcaattgtct gatcagcccc	240
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aatcagttat gcgaaacgtt cgccttcctg atgtccttct ttgggctagc ctcgacctta	360
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gaccactttg tgctgctggc tctcatgaca gtgctcttca ccatgtgttc cctgccttta 840
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gacctccaag ccttgcgctt cctgtctgtg atttccatag tggacccttg gatcttcac 960
atcttcagga cttcagtatt ccggatgtta tttcacaagg ttttcacaag acctctgatc 1020
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<210> 15
<211> 359
<212> PRT
<213> Homo sapiens

<400> 15

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Gly Asn Ser Ala Val Met Gly Gly Val Leu Phe Ser Thr Gly Leu Leu
20 25 30

Gly Asn Leu Leu Ala Leu Gly Leu Leu Ala Arg Ser Gly Leu Gly Trp
35 40 45

Cys Ser Arg Arg Pro Leu Arg Pro Leu Pro Ser Val Phe Tyr Met Leu
50 55 60

Val Cys Gly Leu Thr Val Thr Asp Leu Leu Gly Lys Cys Leu Leu Ser
65 70 75 80

Pro Val Val Leu Ala Ala Tyr Ala Gln Asn Arg Ser Leu Arg Val Leu
85 90 95

Ala Pro Ala Leu Asp Asn Ser Leu Cys Gln Ala Phe Ala Phe Phe Met
100 105 110

Ser Phe Phe Gly Leu Ser Ser Thr Leu Gln Leu Leu Ala Met Ala Leu
115 120 125

Glu Cys Trp Leu Ser Leu Gly His Pro Phe Phe Tyr Arg Arg His Ile
130 135 140

Thr Leu Arg Leu Gly Ala Leu Val Ala Pro Val Val Ser Ala Phe Ser
145 150 155 160

Leu Ala Phe Cys Ala Leu Pro Phe Met Gly Phe Gly Lys Phe Val Gln
 165 170 175

Tyr Cys Pro Gly Thr Trp Cys Phe Ile Gln Met Val His Glu Glu Gly
 180 185 190

Ser Leu Ser Val Leu Gly Tyr Ser Val Leu Tyr Ser Ser Leu Met Ala
 195 200 205

Leu Leu Val Leu Ala Thr Val Leu Cys Asn Leu Gly Ala Met Arg Asn
 210 215 220

Leu Tyr Ala Met His Arg Arg Leu Gln Arg His Pro Arg Ser Cys Thr
 225 230 235 240

Arg Asp Cys Ala Glu Pro Arg Ala Asp Gly Arg Glu Ala Ser Pro Gln
 245 250 255

Pro Leu Glu Glu Leu Asp His Leu Leu Leu Leu Ala Leu Met Thr Val
 260 265 270

Leu Phe Thr Met Cys Ser Leu Pro Val Ile Tyr Arg Ala Tyr Tyr Gly
 275 280 285

Ala Phe Lys Asp Val Lys Glu Lys Asn Arg Thr Ser Glu Glu Ala Glu
 290 295 300

Asp Leu Arg Ala Leu Arg Phe Leu Ser Val Ile Ser Ile Val Asp Pro
 305 310 315 320

Trp Ile Phe Ile Ile Phe Arg Ser Pro Val Phe Arg Ile Phe Phe His
 325 330 335

Lys Ile Phe Ile Arg Pro Leu Arg Tyr Arg Ser Arg Cys Ser Asn Ser
 340 345 350

Thr Asn Met Glu Ser Ser Leu
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<210> 16

<211> 357

<212> PRT

<213> Rattus norvegicus

<400> 16

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20 25 30

Asn Leu Leu Ala Leu Val Leu Leu Ala Arg Ser Gly Leu Gly Ser Cys
35 40 45

Arg Pro Gly Pro Leu His Pro Pro Pro Ser Val Phe Tyr Val Leu Val
50 55 60

Cys Gly Leu Thr Val Thr Asp Leu Leu Gly Lys Cys Leu Ile Ser Pro
65 70 75 80

Met Val Leu Ala Ala Tyr Ala Gln Asn Arg Ser Leu Lys Glu Leu Leu
85 90 95

Pro Ala Ser Gly Asn Gln Leu Cys Glu Ala Phe Ala Phe Leu Met Ser
100 105 110

Phe Phe Gly Leu Ala Ser Thr Leu Gln Leu Leu Ala Met Ala Leu Glu
115 120 125

Cys Trp Leu Ser Leu Gly His Pro Phe Phe Tyr Gln Arg His Ile Thr
130 135 140

Ala Arg Arg Gly Val Leu Val Ala Pro Val Ala Gly Ala Phe Ser Leu
145 150 155 160

Ala Phe Cys Ala Leu Pro Phe Ala Gly Phe Gly Lys Phe Val Gln Tyr
165 170 175

Cys Pro Gly Thr Trp Cys Phe Ile Gln Met Ile His Lys Lys Arg Ser
180 185 190

Phe Ser Val Ile Gly Phe Ser Val Leu Tyr Ser Ser Leu Met Ala Leu
195 200 205

Leu Val Leu Ala Thr Val Val Cys Asn Leu Gly Ala Met Ser Asn Leu
210 215 220

Tyr Ala Met His Arg Arg Gln Arg His His Pro Arg Arg Cys Ser Arg
225 230 235 240

Asp Arg Ala Gln Ser Gly Ser Asp Tyr Arg His Gly Ser Pro Asn Pro
245 250 255

Leu Glu Glu Leu Asp His Phe Val Leu Leu Ala Leu Thr Thr Val Leu
260 265 270

Phe Thr Met Cys Ser Leu Pro Leu Ile Tyr Arg Ala Tyr Tyr Gly Ala
275 280 285

Phe Lys Leu Val Asp Arg Ala Asp Gly Asp Ser Glu Asp Leu Gln Ala
290 295 300

Leu Arg Phe Leu Ser Val Ile Ser Ile Val Asp Pro Trp Ile Phe Ile
305 310 315 320

Ile Phe Arg Thr Ser Val Phe Arg Met Leu Phe His Lys Thr Phe Thr
325 330 335

Arg Pro Leu Ile Tyr Arg Asn Trp Cys Ser His Ser Trp Gln Thr Asn
340 345 350

Met Glu Ser Thr Leu
355

<210> 17
<211> 357
<212> PRT
<213> Mus musculus

<400> 17

Met Asn Glu Ser Tyr Arg Cys Gln Thr Ser Thr Trp Val Glu Arg Gly
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Ser Ser Ala Thr Met Gly Ala Val Leu Phe Gly Ala Gly Leu Leu Gly
20 25 30

Asn Leu Leu Ala Leu Val Leu Leu Ala Arg Ser Gly Leu Gly Ser Cys
35 40 45

Arg Pro Gly Pro Leu His Pro Pro Pro Ser Val Phe Tyr Val Leu Val
50 55 60

Cys Gly Leu Thr Val Thr Asp Leu Leu Gly Lys Cys Leu Ile Ser Pro
65 70 75 80

Met Val Leu Ala Ala Tyr Ala Gln Asn Gln Ser Leu Lys Glu Leu Leu
85 90 95

Pro Ala Ser Gly Asn Gln Leu Cys Glu Thr Phe Ala Phe Leu Met Ser
100 105 110

Phe Phe Gly Leu Ala Ser Thr Leu Gln Leu Leu Ala Met Ala Val Glu
115 120 125

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Cys Trp Leu Ser Leu Gly His Pro Phe Phe Tyr Gln Arg His Val Thr
130 135 140

Leu Arg Arg Gly Val Leu Val Ala Pro Val Val Ala Ala Phe Cys Leu
145 150 155

Ala Phe Cys Ala Leu Pro Phe Ala Gly Phe Gly Lys Phe Val Gln Tyr
165 170 175

Cys Pro Gly Thr Trp Cys Phe Ile Gln Met Ile His Lys Glu Arg Ser
180 185 190

Phe Ser Val Ile Gly Phe Ser Val Leu Tyr Ser Ser Leu Met Ala Leu
195 200 205

Leu Val Leu Ala Thr Val Val Cys Asn Leu Gly Ala Met Tyr Asn Leu
210 215 220

Tyr Asp Met His Arg Arg Gln Arg His Tyr Pro His Arg Cys Ser Arg
225 230 235 240

Asp Arg Ala Gln Ser Gly Ser Asp Tyr Arg His Gly Ser Leu His Pro
245 250 255

Leu Glu Glu Leu Asp His Phe Val Leu Leu Ala Leu Met Thr Val Leu
260 265 270

Phe Thr Met Cys Ser Leu Pro Leu Ile Tyr Arg Ala Tyr Tyr Gly Ala
275 280 285

Phe Lys Leu Glu Asn Lys Ala Glu Gly Asp Ser Glu Asp Leu Gln Ala
290 295 300

Leu Arg Phe Leu Ser Val Ile Ser Ile Val Asp Pro Trp Ile Phe Ile
305 310 315 320

Ile Phe Arg Thr Ser Val Phe Arg Met Leu Phe His Lys Val Phe Thr
325 330 335

Arg Pro Leu Ile Tyr Arg Asn Trp Ser Ser His Ser Gln Gln Ser Asn
340 345 350

Val Glu Ser Thr Leu
355

<210> 18
<211> 359

<212> PRT
<213> Artificial

<220>
<223> majority sequence of guinea pig, human, mouse and rat

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<222> (294)..(294)
<223> E, K, N or D

<220>
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<223> S, E or D

<220>
<221> MISC_FEATURE
<222> (347)..(347)
<223> C or S

<220>
<221> MISC_FEATURE
<222> (351)..(351)
<223> Y, N, Q or W

<400> 18

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Gly Ser Ser Ala Thr Met Gly Gly Val Leu Phe Ser Ala Gly Leu Leu
20 25 30

Gly Asn Leu Leu Ala Leu Val Leu Leu Ala Arg Ser Gly Leu Gly Ser
35 40 45

Cys Arg Pro Gly Pro Leu His Pro Pro Pro Ser Val Phe Tyr Val Leu
50 55 60

Val Cys Gly Leu Thr Val Thr Asp Leu Leu Gly Lys Cys Leu Ile Ser
65 70 75 80

Pro Val Val Leu Ala Ala Tyr Ala Gln Asn Arg Ser Leu Lys Glu Leu
85 90 95

Ala Pro Ala Ser Gly Asn Ser Leu Cys Glu Ala Phe Ala Phe Leu Met
100 105 110

Ser Phe Phe Gly Leu Ala Ser Thr Leu Gln Leu Leu Ala Met Ala Leu
115 120 125

Glu Cys Trp Leu Ser Leu Gly His Pro Phe Phe Tyr Gln Arg His Ile
130 135 140

USAV2003-0073USNP-Sequence-AUG2006.ST25.txt

Thr Leu Arg Arg Gly Val Leu Val Ala Pro Val Val Gly Ala Phe Ser
 145 150 155 160
 Leu Ala Phe Cys Ala Leu Pro Phe Ala Gly Phe Gly Lys Phe Val Gln
 165 170 175
 Tyr Cys Pro Gly Thr Trp Cys Phe Ile Gln Met Ile His Lys Glu Arg
 180 185 190
 Ser Phe Ser Val Ile Gly Phe Ser Val Leu Tyr Ser Ser Leu Met Ala
 195 200 205
 Leu Leu Val Leu Ala Thr Val Val Cys Asn Leu Gly Ala Met Arg Asn
 210 215 220
 Leu Tyr Ala Met His Arg Arg Leu Arg His His Pro Arg Arg Cys Ser
 225 230 235 240
 Arg Asp Arg Ala Gln Ser Gly Ser Asp Tyr Arg Glu Gly Ser Pro Gln
 245 250 255
 Pro Leu Glu Glu Leu Asp His Leu Val Leu Leu Ala Leu Met Thr Val
 260 265 270
 Leu Phe Thr Met Cys Ser Leu Pro Leu Ile Tyr Arg Ala Tyr Tyr Gly
 275 280 285
 Ala Phe Lys Leu Val Xaa Glu Arg Ala Xaa Gly Asp Ser Glu Asp Leu
 290 295 300
 Gln Ala Leu Arg Phe Leu Ser Val Ile Ser Ile Val Asp Pro Trp Ile
 305 310 315 320
 Phe Ile Ile Phe Arg Thr Ser Val Phe Arg Met Leu Phe His Lys Ile
 325 330 335
 Phe Ile Arg Pro Leu Ile Tyr Arg Asn Trp Xaa Ser His Ser Xaa Gln
 340 345 350
 Thr Asn Val Glu Ser Ser Leu
 355